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**Operations**

**AIR COMBAT COMMAND (ACC)  
CONCEPT DEVELOPMENT**



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OPR: HQ ACC/XPSC

Certified by: HQ ACC/XP  
(Maj Gen Timothy C. Jones)

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This instruction provides ACC guidance in implementing Air Force Policy Directive (AFPD) 10-28, *Air Force Concept Development*. It establishes HQ ACC directorate and staff agency responsibilities in the preparation, coordination, and dissemination of concept documents. It applies only to Headquarters (HQ) ACC directorates and staff agencies. It does not apply to Air National Guard (ANG) or Air Force Reserve Command (AFRC) units and personnel. Send comments and suggested improvements to this publication on AF Information Management Tool (IMT) 847, **Recommendation for Change of Publication**, through channels to HQ ACC/XPS, 204 Dodd Boulevard, Suite 313, Langley AFB VA 23665-2702.

**SUMMARY OF REVISIONS**

**This document is substantially revised and must be completely reviewed.** It must be reviewed concurrently with AFPD 10-28. This instruction establishes ACC policy to implement new United States Air Force (USAF) policy on concept development. It provides additional guidance for the mandatory concept elements in AFPD 10-28. The Directorate of Plans and Programs, Strategy, Concepts, and Doctrine Division (HQ ACC/XPS) is designated the central point of contact for ACC concepts and will provide and maintain a central web-based library for those concepts at.

**1. ACC Concept Development Guidance:**

1.1. Definition. ACC concepts represent the ACC position as force provider on the planned/expected approach to deploy, employ, and redeploy for air power operations. ACC concepts guide ACC operations planning, and how ACC organizes, trains, and equips to deliver ready forces with the capabilities desired by combatant commanders. They educate ACC and Combat Air Forces (CAF) personnel on the conceptual framework for how individual actions link together to accomplish an operational task. They provide a clear picture of how ACC intends to operate in the future.

1.2. Concept Construct. Figure 1 depicts the relationship between vision, concepts, and doctrine. How the Air Force operates today is captured in doctrine which drives tactics, techniques, and proce-

dures (TTP). Notwithstanding that concepts can be historical or current, new concepts function to bridge the gap between how the AF employs forces and systems today and how it envisions future operations. The concept life cycle begins with a vision or idea of how to solve a military problem. The idea can take further shape in the form of a white paper or journal article. It becomes a concept when the vision is formalized to address the necessary elements of a concept. Concepts identify key technologies, operational concepts, and organizational structures required to achieve future desired effects. Concepts are validated through wargaming, exercises and experimentation, lessons learned, and operational experience. Validated concepts are incorporated in changes to doctrine or in TTPs.

1.3. Development. ACC concept development is warranted by the need to describe how to perform an operational task. This need may be driven by: a capability shortfall identified through analysis, a lack of conceptual framework for an operational task where TTPs have not been established, or to encapsulate operational experience applicable to maturing technologies/systems not captured in doctrine. ACC concepts may be used: to support capability-based planning; in support of exercises, experiments and wargames; as the basis for theater-specific campaign plans and operations plans; to support the Air Force resource allocation process; or to inform and educate a particular audience.

1.3.1. Recommended Approach. In general, begin with the purpose which is driving you to develop a new concept. With that in view, state the military challenge, which is the problem to be solved by your concept. To ensure an effects-based approach, identify the desired outcomes (effects) that characterize success in meeting the challenge. The desired effects will guide the development of a course of action. The sequenced actions section is your solution. It should explain how military functions and capabilities will be applied in time and space and what actions and tasks will create the desired effects to meet the challenge. In the course of formulating a solution, assumptions and risks tend to emerge which may not have been apparent beforehand. Write them down as you go. Now you can analyze your solution to derive the tasks and actions which must be performed to create the desired effects. The ability to perform those actions and tasks are necessary capabilities. Any remaining capabilities required to successfully execute the concept are enabling capabilities. Finish up with the synopsis and summary sections.

#### 1.4. Limitations:

1.4.1. General. ACC concepts are not plans, TTPs, or technical orders (TO) but are broader in scope and may require more specific description in follow-on documents written by/for the user. Operating procedures for existing capabilities as well as organizational changes, implementation plans, and operating instructions are not considered concepts for the purposes of this instruction. Due to their broad nature, ACC concepts generally should not exceed 7-15 pages in length, excluding annexes.

1.4.2. Acquisition. A concept is not intended to serve as a system requirements document, but systems will ultimately be justified and evaluated on the basis of the desired effects they generate and the capabilities they provide the warfighter. This instruction does not create a requirement for weapon systems concepts to be developed. Preferably, materiel solutions are created to satisfy capability shortfalls identified in higher-level operating or functional concepts, such as Air Force CONOPS, which have been validated through wargaming and experimentation. The concept for employing the capability may be sufficiently described in the existing operating or functional concept. Before undertaking concept development, offices of primary responsibility (OPR) should verify the requirement for greater specificity that will not be captured in initial capability docu-

ments (ICD), capability development documents (CDD), or capability production documents (CPD).

**2. ACC Concept Format Guidance.** ACC concepts will be formatted in accordance with AFPD 10-28 to standardize ACC implementation of the mandatory elements. Use the elements identified in paragraph 5 of AFPD 10-28 in the order they appear. Make any added headings subordinate to one of the mandatory elements. Refer to AFPD 10-28 for descriptions of each element. Include the additional considerations listed in this section in enabling concepts when applicable. Describe the overall concept without excessive detail. Detailed and lengthy information (such as functional support plans) may be included in annexes as required. A sample format with additional guidance is provided at [Attachment 2](#).

**3. Responsibilities.** HQ ACC/XPS is the ACC point of contact (POC) for all concepts and office of collateral responsibility (OCR) for ACC-developed concepts and is responsible for policy, guidance, procedures, and oversight for concepts development within ACC.

3.1. ACC Process--Tasking, Staffing, Approval, Publishing:

3.1.1. Tasking. Commander, ACC (COMACC) is the authority for ACC-developed concepts. HQ ACC/XPS is the ACC central POC for all concepts. COMACC will originate or approve all requests for concept development. If an ACC directorate identifies a requirement for concept development and COMACC approves, the directorate will transmit a request for tasking to ACC/CS to include a recommended OPR. The tasking will specify the type of concept (ACC, CAF, USAF, or Joint). The directorate with functional responsibility will be the OPR for the concept. Tasking will flow from ACC/CS to the designated OPR for concept development. HQ ACC/XPS will be an OCR on all concepts developed within ACC.

3.1.2. Staffing ACC-Developed Concepts. The action officer (AO) and OPR write and staff the document in accordance with established staffing procedures described in the ACC AO handbook. The AO may need coordination outside ACC, depending on the content and type of document. Outside agencies could include major commands (MAJCOM), numbered air forces (NAF), other services, wings, etc. CAF, MAF, and NAF coordination requests should come from COMACC.

3.1.3. Approval. COMACC is the approval authority for ACC concepts and coordinates on all concepts developed within ACC. After COMACC approval/coordination, concepts are forwarded from ACC/CS to HQ USAF/XO.

3.1.4. Publishing/Distribution. HQ ACC/XPS will maintain a web-based central file of ACC concepts at . The intent is to make these documents accessible and minimize distribution costs.

3.1.4.1. After approval, the authoring directorate will electronically send two files, Microsoft Word© and Adobe Acrobat PDF versions, to HQ ACC/XPS at or [acc.xps@langley.af.mil](mailto:acc.xps@langley.af.mil). The required index information for web posting is given in [Table 1](#).

**Table 1. Required Index Information for Web Posting.**

Short Title	Size	Concept Title	Date	OPR	Phone	Expiration/Revision
ACC IW	202K	ACC Information Warfare Concept	16 Jun 99	ACC/DOZ	574-3876	indefinite

3.1.4.2. Classified concepts will be maintained on a Secret Internet Protocol Router Network (SIPRNET) web site. Classification markings will match DoD 5200-1.R, *Information Security Program*, AFI 31-401, *Information Security Management*, and ACC security standards. Do not post documents or portions of documents classified above Secret level, containing proprietary information, or otherwise restricted from publication.

#### **4. Information Collections, Records, and Information Management Tools (IMT):**

- 4.1. Information Collections. No information collections are created by this publication.
- 4.2. Records. Records generated by this publication will be managed IAW the Records Disposition Schedule (RDS).
- 4.3. IMTs:
  - 4.3.1. IMTs Prescribed. None.
  - 4.3.2. IMTs Adopted. AF IMT 847, **Recommendation for Change of Publication.**

HAL M. HORNBURG, General, USAF  
Commander

## Attachment 1

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

*References*

AFPD 10-28 (<http://www.e-publishing.af.mil/pubfiles/af/10/afpd10-28/afpd10-28.pdf>), *Air Force Concept Development*

*Abbreviations and Acronyms*

**ACC**—Air Combat Command

**ACCI**—Air Combat Command Instruction

**AFPD**—Air Force Policy Directive

**AFRC**—Air Force Reserve Command

**ANG**—Air National Guard

**AO**—action officer

**CAF**—Combat Air Forces

**CDD**—capability development document

**CIA**—Central Intelligence Agency

**COMACC**—Commander, Air Combat Command

**CONOPS**—Concepts of Operation

**CONUS**—continental United States

**CPD**—capability production document

**DIA**—Defense Intelligence Agency

**HQ**—headquarters

**ICD**—initial capability document

**IMT**—information management tool (formerly referred to as a "form")

**MAF**—Mobility Air Forces

**MAJCOM**—Major Command

**NAF**—Numbered Air Forces

**NIMA**—National Imagery and Mapping Agency

**NSA**—National Security Agency

**OCR**—office of collateral responsibility

**OPR**—office of primary responsibility

**PDF**—Portable Document Format

**POC**—point of contact

**RED HORSE**—Rapid Engineers Deployable Heavy Operations Repair Squadron, Engineers

**SIPRNET**—Secret Internet Protocol Router Network

**TBM**—tactical ballistic missile

**T.O.**—technical order

**TTP**—tactics, techniques, and procedures

**USAF**—United States Air Force

**Attachment 2****ACC CONCEPT FORMAT GUIDANCE**

**A2.1. Sample Format for ACC Concept:** To use this attachment as a template, copy the title page and following paragraphs into a new document, renumber the paragraphs by removing “A2.1.” from the beginning of each paragraph number, then replace the guidance with your concept material.

**AIR COMBAT COMMAND (ACC)****ENABLING CONCEPT****FOR****XXXXXX XXXX XXXXXXXX****DATE**

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**NOTICE:** This concept is available digitally on the HQ ACC/XPS WWW site at: .

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Prepared by: &lt;organization/office symbol&gt; (Action Officer name)

Reviewed by: &lt;organization/office symbol&gt; (Division Chief name)

Submitted by: &lt;organization/office symbol&gt; (Director name)

Approved by ACC/CC (COMACC name)

Document date: (Use same date as in header)

Distribution:

No. of Pages:

Classification Authority:

Declass Instructions:

A2.1.1. Purpose (5.1\*). Include a purpose statement that lays out the intended uses of the concept. In addition to the purpose statement, identify the category of the concept using the definitions in AFRD 10-28. ACC concepts will usually be enabling concepts since they will normally not encompass the full scope of military actions required to achieve joint force commander (JFC) objectives. Identify any hierarchical relationship to existing USAF, ACC, CAF, Mobility Air Forces (MAF), or joint concepts.

A2.1.2. Time Horizon, Assumptions, and Risks (5.2\*). Specify the applicable time period, critical assumptions that establish the limits of the concept, and applicable risks that influence further concept development and execution. Reference AFRD 10-28.

A2.1.3. Description of the Military Challenge (5.3\*). A future concept must include a description of the military challenge the concept is meant to solve. The problem to be solved should include any possible ground threat and related physical security concerns. The problem statement may also highlight a deficiency in a system, structure, architecture, etc., or the desired deployment/employment definition of a new or revised system or organization.

A2.1.4. Synopsis (5.4\*). The synopsis is a high-level outline that briefly captures the essence of the concept's objective(s), desired effects, necessary capabilities (means), and sequenced actions (ways). Reference AFRD 10-28.

A2.1.5. Desired Effects (5.5\*). Describe the desired operational effect of achieving military objectives. Reference AFRD 10-28.

A2.1.6. Necessary Capabilities (5.6\*). Describe the means necessary to accomplish a task in order to generate the desired effects while mitigating inherent risk. Capability statements should be separately identified in a bulleted list or as headings to narrative explanations. Capability statements will be concise and should describe the feature or characteristic of the system or function required to achieve the desired effects. Example:

- Mobility
  - Extend range, payload, and flexibility of Global Strike assets
  - Ability to rapidly deploy expeditionary air and space forces from home station
- Neutralization
  - Neutralize Weapons of Mass Destruction
    - Neutralize TBMs in flight
    - Neutralize cruise missiles in flight

**NOTE:** Where applicable, provide a physical description of the system, organization, and function. Specific capabilities, characteristics, and performance factors should be discussed.

A2.1.7. Enabling Capabilities (5.7\*). Describe those capabilities not directly related to the desired effects but essential for successful execution of the concept. Reference AFRD 10-28.

A2.1.8. Sequenced Actions (5.8\*). When the concept is scenario-based, describe the logical sequence of actions needed to execute the concept. Describe how capabilities are best applied and integrated to achieve the desired effects. Describe separate scenarios and employment tactics. Depict situations (how, where, when) and environment in which the system or concept will be employed. For each scenario, provide the major sequenced actions needed to successfully carry out the operational employment concept from start to finish. As needed, include the following:

- Mission planning needs
- Intelligence and weather support
- Physical security requirements
- Mapping, charting, and geodesy needs
- Integration with existing, developing, or planned operational procedures
- Transportability or how it will be moved/deployed, to/from or within the theater
- Basing requirements: Continental United States (CONUS) basing/training; overseas, base, satellite, dispersal base options; forward operating locations; etc.
- Logistics supportability requirements



**NOTE:** Some functional or enabling concepts may not be scenario based. In such cases, organize the information along functional tasks or logical categories that best describe how to implement the concept.

A2.1.8.1. Intelligence/National Agency/Space Support (As Required):

A2.1.8.1.1. Intelligence. If known, describe intelligence programs, methods, systems, and organizations that will support the operational mission outlined in the concept. This section should include how data is available for mission planning and execution requirements for theater support, command support, and service support. The intelligence data would be available through core intelligence support, command reachback support, weapon system-specific support (National/theater reachback) and in-garrison/deployed service reachback support.

A2.1.8.1.2. National Agency. Include how agencies such as Defense Intelligence Agency (DIA), National Imagery and Mapping Agency (NIMA), National Security Agency (NSA), Central Intelligence Agency (CIA), or the State Department would interface to support your concept.

A2.1.8.1.3. Space. The concept should address specific space support that is NOT already included in the other portions of the concept.

A2.1.8.2. Communications/Computer System Support (As Required). Describe communications and information support requirements. Identify scope of information transfer and type of communications networking required. Identify expected interfaces with other communications and information systems. Detailed information may be included in annexes as required.

A2.1.8.3. Integration and Interoperability (As Required):

A2.1.8.3.1. Integration with Other Systems. Describe how the concept can complement or interface with other systems or operations. Is its effect synergistic? Will it be a force multiplier?

A2.1.8.3.2. Interoperability. Describe requirements for joint service, cross servicing, support, etc. Identify procedural and technical interface standards to be incorporated into the system or operational design to ensure the required degree of interoperability between the system or operation and Air Force, joint service, and coalition systems or operations.

A2.1.8.4. Force Protection/Security (As Required):

A2.1.8.4.1. Anti-terrorism/Force Protection. List activities that prevent or mitigate successful hostile actions against Air Force people and resources when they are not directly engaged with the enemy.

A2.1.8.4.2. Operations Security. Define the concept's critical security elements and ways to prevent inadvertent release of information.

A2.1.8.4.3. Physical. Define the traditional security requirements. Highlight items such as special access programs, program security guides, contractor involvement, foreign national involvement, etc. Physical security should include the system's proposed security priority (if any) and justification. It should include physical security concerns throughout the system's life cycle, to include owner/user and Security Forces responsibilities.

A2.1.8.5. Training (As Required). Describe the training requirements to include frequency, places, interface with other units and services, etc. Also include training scope, operator training, and any future training enhancements.

A2.1.8.6. Logistics (As Required). Describe the overall logistics supportability of the concept. Identify any potential logistics limiting factors or shortfalls. Highlight any special logistics or transportation requirements for implementing the operations scenarios listed in Section 3 (deployment, employment, and redeployment), including an overview of the maintenance concept (if appropriate).

A2.1.8.7. Installations/Infrastructure (As Required). Describe the overall installation/ infrastructure supportability of the concept including any potential limiting factors or shortfalls. Highlight any special Rapid Engineers Deployable Heavy Operations Repair Squadron, Engineers (RED HORSE); Explosive Ordnance Disposal; Crash/Fire/Rescue; Readiness; Services; or Civil Engineer requirements for implementing the operations scenarios (deployment, employment, and redeployment), including an overview of the base beddown and sustainment concept (if appropriate). Identify manpower impact if available.

A2.1.9. Command Relationships/Architecture (5.9\*). If known, define the command relationships (Combatant Command, Operational Control, etc.) and support required to employ the concept or system in peacetime, crisis, and war. Describe the types of command and control information to be exchanged. Describe how the system will integrate into the command and control structure forecast to exist at the time the operation or system is fielded. Include organizational structure if available. Detailed information may be included in annexes as required.

A2.1.10. Summary (5.10\*). Briefly summarize the concept.